

COASTAL CONSERVANCY

Staff Recommendation  
October 27, 2005

**HUMBOLDT BAY WATERSHED  
FAY SLOUGH AND TRIBUTARIES  
FINAL DESIGN AND PRE-CONSTRUCTION ACTIVITIES**

File No. 02-058-02  
Project Manager: Jim King

**RECOMMENDED ACTION:** Authorization to disburse up to \$245,000 to the Redwood Community Action Agency for preparation of final designs and environmental review documents, permits and other work required to construct estuary enhancement, fish passage and riparian enhancement projects at Redmond and Cochrane Creeks in the area bounded by Freshwater, Eureka and Fay Sloughs in the northern Humboldt Bay region.

**LOCATION:** Redmond and Cochrane Creeks in the area bounded by Freshwater, Eureka, and Fay Sloughs in the northeastern Humboldt Bay watershed, Humboldt County (Exhibit 1).

**PROGRAM CATEGORY:** Resource Enhancement

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**EXHIBITS**

Exhibit 1: Project Location and Site Map

Exhibit 2: Humboldt Bay Watershed SSCP Subunits

Exhibit 3: Photographs

Exhibit 4: Letters of Support

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**RESOLUTION AND FINDINGS:**

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31000 *et seq.* of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed \$245,000 to the Redwood Community Action Agency for preparation of final designs and environmental review documents, permits and other work prerequisite to construction of estuary enhancement, fish passage and riparian enhancement projects at Redmond and Cochrane Creeks in the area bounded by Freshwater, Eureka and Fay Sloughs in the northern Humboldt Bay region subject to the following conditions:

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Prior to disbursement of Conservancy funds, Redwood Community Action Agency shall submit for the written approval of the Conservancy's Executive Officer a work program, budget, names of contractors it intends to engage for the project and a signing plan acknowledging the Conservancy and Proposition 12 funding."

Staff further recommends that the Conservancy adopt the following findings:

"Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed authorization is consistent with Chapter 6 of Division 21 of the Public Resources Code.
2. The proposed authorization is consistent with the Project Selection Criteria and Guidelines adopted by the Conservancy on January 24, 2001.
3. The Redwood Community Action Agency is a private nonprofit organization existing under Section 501(c)(3) of the Internal Revenue Service Code, and whose purposes are consistent with Division 21 of the Public Resources Code."

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**PROJECT SUMMARY:**

Staff recommends authorization to disburse up to \$245,000 to the Redwood Community Action Agency (RCAA) for preparation of final designs and environmental review documents, permits and other work required in advance of constructing estuarine enhancement, fish passage and riparian enhancement projects at Redmond and Cochrane Creeks in the area bounded by Freshwater, Eureka and Fay Sloughs in the northern Humboldt Bay region (Exhibit 1).

Conservancy-funded watershed scale planning undertaken by RCAA and an advisory committee representative of the diverse interests in the watershed resulted in preparation of the Humboldt Bay Watershed Salmon and Steelhead Conservation Plan (SSCP), the centerpiece of the planning effort. The SSCP addresses the four major streams of the watershed, documents RCAA's work in compiling and evaluating information, developing goals, objectives and priorities for protecting and/or restoring watershed processes, and establishing conceptual plans for improving habitat for these bellwether species (Exhibit 2).

The proposed authorization will set the stage for enhancement of the lower Freshwater Creek sub-basin, an area of the Humboldt Bay bottomlands where creek channels are choked with invasive weeds and sediment, eliminating fish habitat and requiring ongoing maintenance to provide proper drainage for pastures and livestock. Community and regulatory agency concerns over upslope sediment production, vegetation and sediment removal, and deteriorating levee and tidegate structures combine to undermine agricultural productivity and local landowners are interested in solutions. Because of the nexus of agricultural and habitat issues, it is a particularly opportune time and location for Conservancy action implementing the SSCP.

Nearby fish passage and other complementary projects involving public agencies, land trusts and private landowners have had immediate and impressive results for salmonids, including the federally-listed coho salmon. It is expected that the projects developed by RCAA, in aggregate

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with other work recently implemented or now underway, will further demonstrate the viability of public-private partnerships required for success in this arena, establish the technical merits of the designs, and serve as a model for similar actions throughout the four sub-basins of the watershed allowing for an accelerated and sustained effort to achieve the goals of the Humboldt Bay Watershed SSCP.

Under the proposed authorization, RCAA will conduct a feasibility analysis and develop restoration design alternatives for the defined project area derived from conceptual designs developed in the watershed plan. A regulatory constraint analysis and regulatory compliance strategy for the proposed alternatives will be developed. RCAA will then work with landowners, government agencies, watershed groups and other fishery and restoration interests to select a preferred restoration project and to develop detailed project designs. RCAA will undertake all necessary site assessments required to develop detailed construction plans and supporting environmental documents. These are expected to include hydrologic modeling, site-specific biological assessments including vegetative cover and fish habitat surveys, endangered species surveys and cultural resource assessments. Lastly, RCAA will prepare an Initial Study and subsequent environmental review documents anticipated for compliance with the California Environmental Quality Act, secure permits needed to implement the project and prepare detailed cost estimates and necessary construction bid documents. This final pre-construction planning work will be initiated in winter 2006 and should be completed in approximately two years. No physical alterations to the environment are associated with this authorization.

Staff believes RCAA to be uniquely qualified for the work required to bring Humboldt Bay watershed restoration projects to construction. Their sustained leadership of the Humboldt Bay Watershed Advisory Committee over the past five years brought diverse interests together to produce a useful and informative plan that should have longstanding value. This effort, a twenty-year record of performance with the Conservancy on enhancement and public access initiatives, and their substantial record with other public agencies gives us confidence that RCAA is suited for the focused and ambitious work program proposed.

**Site Description:** The lower reaches of Cochran and Redmond Creeks where they flow into Fay Slough were historically a transitional area from upstream freshwater aquatic habitats to brackish-water, estuarine habitats typical of low-lying areas along the Humboldt Bay bottomlands (Exhibits 1 and 3). In their natural state estuaries are made up of a complex network of channels, mudflats, and marsh habitats. The proposed project area has been altered substantially. It was originally part of Humboldt Bay's extensive system of intertidal salt marsh and mud flats prior to the construction of the railroad and a network of levees in the early 1900's. Remnant channels of the former tidal marsh, and meanders and side channels of Fay Slough are visible on early maps and current aerial photographs of the area.

Cochran and Redmond Creeks once flowed directly into Fay Slough, and have been known to support salmonid species such as coho salmon, coastal cutthroat trout and steelhead (DFG, 2004). Landowners on Redmond Creek observed salmon on a regular basis twenty to thirty years ago. Salmonid access to these creeks is extremely limited by the current wooden flap-type tidegates at the confluence with Fay Slough. In addition, the culverts on Myrtle Avenue are undersized and often filled with sediment. Habitat is further degraded by the lack of riparian vegetation and unrestricted cattle access along and in the stream channels. Timber harvest and residential development in the upper watershed have also impacted fisheries habitat through increased

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turbidity and sedimentation, altered hydrology and overall loss of instream habitat diversity. Other land use adjacent to the proposed project area includes California Department of Fish and Game's (DFG) Fay Slough Wildlife Area, Humboldt County's Murray Field Airport, Highway 101, a railroad corridor, a car dealership, light industry and commercial zones, rural residential areas, and U.S. Fish and Wildlife Service refuge lands on the Bay.

Despite human-induced impacts, the area contains a diversity of habitat types that support a wealth of various marine and freshwater fish species. Freshwater Creek has a well-studied salmonid community that includes coho, steelhead, chinook, and cutthroat and rainbow trout. Recent fisheries assessment work indicates that rearing coho utilize Fay and Freshwater Sloughs, which likely provide refuge for other rearing juvenile salmonids as well. The project area represents significant potential for improving the extent and quality of estuary habitat for salmonids, and for opening access to historic spawning and rearing areas.

The former tidelands of the project area now primarily support pasture and hay production. Landowners are increasingly burdened by the ongoing maintenance required to provide proper drainage for their pastures and livestock. The creek channels are choked with invasive weeds and sediment, adding to drainage problems. Increased regulations concerning vegetation and sediment removal, upgrading of aging levee and tidegate structures, and increases in upslope sediment production are impacting the long-term agricultural productivity in the project area. Currently the channels have little or no fish habitat value. Improved tidal exchange on lower Cochran and Redmond Creek could eliminate these aquatic weeds contributing to better drainage of pasturelands, healthier pastures and livestock, and, with additions of fencing and native tree planting, a healthier riparian habitat.

**Project History:** The Conservancy was joined by other state agencies in 2002 in authorizing watershed scale planning for the stream systems that constitute the Humboldt Bay watershed. The Department of Fish and Game (DFG), the Regional Water Quality Control Board and the University of California Cooperative Extension Sea Grant program each contributed to the assessment which was funded in large part by the Conservancy. The plan was developed and facilitated by RCAA under the guidance of the Humboldt Bay Watershed Advisory Committee (HBWAC), a multi-stakeholder collaborative watershed-based working group. The plan's centerpiece, the Salmon and Steelhead Conservation Plan (SSCP), was accompanied by technical information, detailed profiles, and conceptual plans for restoring salmonid habitat in the bay's four primary subwatersheds: Jacoby Creek, Freshwater Creek, Elk River, and Salmon River.

The listing of Humboldt Bay watershed runs of Chinook and coho salmon, and steelhead trout on the federal Endangered Species List as threatened, as well as the state listing of local coho as threatened under the California Endangered Species Act, prompted HBWAC to focus efforts on development of the Salmon and Steelhead Conservation Plan. The plan includes information describing the historic and current conditions of the watershed, limiting factors and environmental stressors for salmonids, and conservation and restoration goals and objectives for the main tributary streams of the bay.

The SSCP compiled information and detailed results from numerous assessments to determine current watershed conditions and limiting factors in each sub-watershed. A Technical Advisory Team prioritized SSCP goals by analyzing the factors that would lead to long-term sustainability of

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functional salmonid habitat. These actions are identified as those that focus generally on treating the causes of habitat degradation rather than on their effects, resulting in a hierarchy of recommended actions which place high value on protecting and restoring high quality riparian areas and correcting road-related erosion and fish passage barriers.

This interaction with landowners, resource agencies, scientists, local land trusts and fishery interests required to develop the watershed plan positioned RCAA for selecting the proposed Fay Slough project area as the most opportune for productive work for implementing projects outlined in the SSCP. The proposal is in accord with DFG's Coho Recovery Plan (2004) and local DFG staff view the proposal for cooperative funding of the Fay Slough and Tributaries Project as a high priority under DFG's statewide Anadromous Fisheries Restoration Program. Landowners are interested in being able to maintain and improve the productive use of their pasturelands through the drainage improvements associated with the project, actions which at the same time provide improvement for salmonid habitat, thus meeting the requirements of permitting agencies. Productive work in the Fay Slough, Redmond and Cochran Creek bottomlands is expected to generate support for action throughout the Humboldt Bay watershed from resource agencies and landowners alike.

**PROJECT FINANCING:**

Coastal Conservancy	\$245,000
Dept. of Fish and Game (proposal in review)	<u>48,000</u>
<b>Total Project Cost</b>	<b>\$293,000</b>

Source of Conservancy funding proposed for the project is expected to be Safe Neighborhood Parks, Clean Water, Clean Air, and Coastal Protection Bond Act of 2000 (Proposition 12) funds allocated for the acquisition, development, rehabilitation, restoration, enhancement, and protection of real property, or other actions that benefit fish and wildlife, north of the Gualala River. The authorization is consistent with the funding source as the project will provide detailed plans, environmental review and permits needed to support implementation of enhancement projects. Department of Fish and Game funds are proposed under the department's FY 05-06 Anadromous Fisheries Restoration Grant Program.

**CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:**

The proposed project is undertaken pursuant to Chapter 6 of Division 21 of the Public Resources Code (Sections 31251-31270 et seq.) as follows:

Under Section 31251, the Conservancy may award grants to public agencies and nonprofit organizations for the purpose of enhancement of coastal resources, which, because of human-induced events, or incompatible land uses, have suffered loss of natural and scenic values. This authorization will result in the pre-construction activities necessary for actions to address the loss of natural and scenic values in the Fay Slough area of the Humboldt Bay watershed.

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Consistent with Section 31252, the proposed project is consistent with the City of Eureka Local Coastal Program and Humboldt County Local Coastal Program as described in the Consistency with Local Coastal Program Policies below.

Under Section 31253, the Conservancy may provide up to the total cost of any coastal resource enhancement project. Consistent with this section, the proposed project would include funding from the Conservancy and the Department of Fish and Game's Anadromous Fisheries Restoration Program.

**CONSISTENCY WITH CONSERVANCY'S  
STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):**

Consistent with the Conservancy's Strategic Plan **Goal 5, Objective A**, the project would advance the goal of implementing projects that protect, restore and enhance coastal wetland and estuarine habitats, stream corridor and coastal forest land including redwoods and Douglass fir.

Consistent with Strategic Plan **Goal 5, Objective B**, the proposal would lead to implementation of projects that would preserve and restore habitat corridors linking coastal habitats to inland habitat areas.

Consistent with Strategic Plan **Goal 6, Objective A**, the proposal would lead to implementation of projects that would restore coastal watersheds, helping anadromous fish, and affect significant coastal resources.

**CONSISTENCY WITH CONSERVANCY'S  
PROJECT SELECTION CRITERIA & GUIDELINES:**

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines adopted January 24, 2001, in the following respects:

**Required Criteria**

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Support of the public:** The project proposed by the Redwood Community Action Agency has been conceived by the Humboldt Bay Watershed Advisory Committee and is widely supported by its members, elected officials and members of the public (Exhibit 4, Support Letters).
4. **Location:** The proposed project would be located within the coastal zone of the City of Eureka and County of Humboldt.
5. **Need:** Recent fish passage work in the vicinity has had remarkable success for coho salmon and other fish species in small localized areas. The Conservancy's collaboration with Department of Fish and Game, landowners, and others is essential to build a foundation for

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addressing SSCP recommendations in the comprehensive manner and at the landscape scale needed to effect larger and more substantial habitat enhancement success while ensuring agricultural viability.

6. **Greater-than-local interest:** The proposed project is expected to lead to actions that will expand intertidal wetlands and enhance habitat for coho salmon and other anadromous fish, both long-term goals of the region and state.

**Additional Criteria**

7. **Urgency:** Agricultural landowners that hold most of the private land in the project area have expressed a willingness to cooperate with RCAA in developing solutions to resource problems on their lands. With habitat and agricultural interests too often viewed in opposition, staff believes that an opportunity exists that is unique, that may be fleeting in nature, and therefore warrants urgent action.
8. **Resolution of more than one issue:** The proposed work will provide opportunities for actions that will address multiple resource enhancement objectives including fishery enhancement, wetland restoration, riparian corridor enhancement while at the same time potentially improving conditions for agricultural operations.
9. **Leverage:** See the “Project Financing” section above.
10. **Conflict resolution:** The work that is proposed can lead to alleviation of conditions adversely affecting fisheries and agriculture, both significant contributors to the coastal economy and culture that are viewed as being intractably in conflict. If both fish habitat and grazing productivity are ultimately enhanced by the authorized pre-construction activities, a significant natural resource conflict will have been resolved.
11. **Innovation:** The project holds promise for cooperative agreements for instream projects and land alterations on privately-held land that benefit the public trust and agricultural operations alike, potentially resulting in a model for similar work elsewhere in the Humboldt Bay watershed and other areas of the state.
12. **Readiness:** RCAA has a proven track record for accomplishing similar work and is prepared to aggressively pursue this work so as to provide projects for implementation.
13. **Realization of prior Conservancy goals:** See “Project History” above.
15. **Cooperation:** The Humboldt Bay Watershed Advisory Group coordinated by RCAA has successfully developed the cooperative environment needed to bring public agencies, landowners, nonprofit groups and private interests together to develop natural resource projects for implementation on private lands.

**CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:**

The project is consistent with the Humboldt County and City of Eureka local coastal plans which overlap in the project area. The Humboldt County General Plan, Volume II, Humboldt Bay Area Plan of the Humboldt County Local Coastal Program (certified October 14, 1982) and its supporting zoning regulations for portions of the project area contain policies to protect prime agricultural land, protect endangered species, and to preserve natural resource areas. Specifically, Chapter 3, Section 5(a) and its supporting maps designate much of the project area either as

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“Farmed Wetlands” or “Wetland Restoration Study Areas” and supports wetlands restoration “...when there is a willing seller and where the project will not interfere with adjacent agricultural operations.” The proposed project would lead to actions that would achieve gains both in habitat quality and agricultural productivity thus assisting Humboldt County in effectuating its Local Coastal Program and related Coastal Act policies.

The City of Eureka certified LCP also supports the intent of the proposed project. Section 6 of the Eureka LCP seeks to establish a comprehensive wetland management program to enhance the biological productivity of wetlands, to eliminate conflicts with upland uses, and to provide restoration areas.

**COMPLIANCE WITH CEQA:** The proposed project is statutorily exempt from review under the California Environmental Quality Act (CEQA) pursuant to 14 Cal. Code of Regulations Section 15262, in that it would involve only planning and analyses for possible future actions which the agency has not approved, adopted, or funded. The project is also exempt under Section 15306, which exempts basic data collection and resource evaluation activities. Environmental factors will be considered in the studies undertaken pursuant to this authorization. Upon approval staff will file a Notice of Exemption for this project.